

CLAIMS

WHAT IS CLAIMED IS:

1. In an adjustable splint assembly having a lower strut and an upper strut, having there between a pivotably mounted head portion defining a cam surface, and the lower strut having at one end an adjustable biasing means biased into engagement with said cam surface, for applying a quantifiable force,

the improvement comprising the lower strut being provided with a loading screw, spring and a spring spacer contained within an inner housing tube having a window and with said inner housing tube being contained within an outer lower leg tube, wherein the spring spacer has imprinted thereon a graduated number series; the inner housing tube having therein a window through which the graduated number series of the spring spacer would be visible, and also on said outer lower leg tube, there is a securing means which will attach to the inner housing tube to adjust the length of the strut, the outer housing tube having a series of windows with each window of the series of windows being able individually depending on the length of the lower strut to register with said graduated number series on the spring spacer and with the window of the inner housing tube such that with this arrangement the adjustable splint assembly is able to accommodate a variety of leg sizes without having to change the spring spacer when the loading screw applies pressure to the spring and to the spring spacer which in turn applies pressure through the cam surface in the pivotably mounted head portion.

2. The adjustable splint assembly of claim 1 wherein the securing means comprises the lower leg tube having a telescopic pull latch firmly attached thereto so as to engage with the holes of the lower inner housing tube.

3. The adjustable splint of claim 1 wherein the securing means comprises a series of holes on the inner housing tube and a hole on the outer lower leg tube and a screw which can be used to join the inner housing tube and outer lower leg tube.

4. The adjustable splint assembly of claim 1 wherein the upper strut has an inner stem rod contained within an outer upper leg tube and wherein the securing means comprises the inner stem rod having a series of holes longitudinally thereof and the outer upper leg tube being provided with a latch to engage said inner stem rod in order to adjust length of the upper strut.

5. The adjustable splint assembly of claim 1 having pads attached thereto to assure a comfortable fit of splint on the patient.

6. An adjustable splint device for relieving contracture comprising the adjustable splint assembly claim 1 provided with a binding means for attaching the adjustable splint device at the knee to the upper and lower part of the leg.

7. An adjustable splint device for relieving contracture comprising multiple adjustable splint assemblies joined by a means to join said multiple adjustable splint assemblies and allow for efficient placement of the adjustable splint device on the leg and thigh and wherein each adjustable splint assembly which forms the adjustable splint device is an adjustable splint assembly as characterized by the adjustable splint assembly of claim 1.

8. In an adjustable splint assembly having a lower strut and an upper strut, having there between a pivotably mounted head portion defining a cam surface, and the lower strut having at one end an adjustable biasing means biased into engagement with said cam surface, for applying a quantifiable force,

the upper strut having an inner stem rod and an outer upper leg tube and wherein the outer upper leg tube has a latch attached thereto to be received into holes in the inner tube,

the improvement comprising the lower strut being provided with a loading screw, spring and a spring spacer contained within an inner housing tube having a window and with said inner housing tube being contained within an outer lower leg tube,

wherein the spring spacer has imprinted thereon a graduated number series; the inner housing tube having therein a window through which the graduated number series of the spring spacer would be visible, and also on said outer lower leg tube, there is a latch means which will attach to holes in the inner housing tube to adjust the length of the strut,

the outer lower leg tube having a series of windows with each window of the series of windows being able individually depending on the length of the lower strut to register with said graduated number series on the spring spacer and with the window of the inner housing tube such that with this arrangement the adjustable splint assembly is able to accommodate a variety of leg sizes without having to change the spring spacer when the loading screw applies pressure to the spring and to the spring spacer which in turn applies pressure through the cam surface in the pivotably mounted head portion.